

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP2004/010871

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H03M13/27

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H03M G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	"IN-PLACE REORDERING OF DATA USING A DOUBLE BUFFER" IBM TECHNICAL DISCLOSURE BULLETIN, IBM CORP. NEW YORK, US, vol. 36, no. 4, 1 April 1993 (1993-04-01), pages 95-97, XP000364453 ISSN: 0018-8689 page 95 - page 97 figure 2 page 95 - page 97; figure 2 ----- -/--	1-25

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*Z\* document member of the same patent family

Date of the actual completion of the international search

15 December 2004

Date of mailing of the international search report

30/12/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Holzlöhner, R

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/010871

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FICH F E ET AL: "Permuting" PROCEEDINGS OF THE 31ST ANNUAL SYMPOSIUM ON FOUNDATIONS OF COMPUTER SCIENCE, ST. LOUIS, MO, USA, 22-24 OCT. 1990. IEEE COMP. SOC. PRESS, LOS ALAMITOS, CA, USA, 22 October 1990 (1990-10-22), pages 372-379, XP010021000 ISBN: 0-8186-2082-X page 372 - page 373 figures 1-3 page 373, paragraph 3	1-25
A	HANNA S A: "CONVOLUTIONAL INTERLEAVING FOR DIGITAL RADIO COMMUNICATIONS" INTERNATIONAL CONFERENCE ON UNIVERSAL PERSONAL COMMUNICATIONS, IEEE, NEW YORK, NY, US, vol. 1, 12 October 1993 (1993-10-12), pages 443-447, XP000600275 page 443 - page 444	1-25
A	EP 0 715 416 A (AT & T CORP) 5 June 1996 (1996-06-05) the whole document	1-25
A	WO 01/82054 A (UBINETICS LTD ;WOODARD JASON PAUL (GB)) 1 November 2001 (2001-11-01) the whole document	1-25

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/010871

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0715416	A	05-06-1996	US 5566183 A	15-10-1996
			CN 1129887 A	28-08-1996
			EP 0715416 A2	05-06-1996
			JP 3241984 B2	25-12-2001
			JP 8237147 A	13-09-1996
			PL 311513 A1	10-06-1996
WO 0182054	A	01-11-2001	GB 2361781 A	31-10-2001
			AU 4863901 A	07-11-2001
			CN 1432150 T	23-07-2003
			EP 1277106 A1	22-01-2003
			WO 0182054 A1	01-11-2001
			JP 2003532187 T	28-10-2003
			US 2003101196 A1	29-05-2003